

Chapter 6.4

Food Safety

This could be you . . .

A food employee didn't wash his hands after using the restroom and then prepared food for the salad bar and contaminated it. Six percent of the staff members became ill with acute dysentery with symptoms including chills, fever, abdominal cramps, and the abrupt onset of profuse watery or bloody diarrhea. Twenty-four individuals required hospitalization for intravenous hydration. The duration of illness for most persons ranged from 3 to 8 days.

1. Applicability of this chapter

You are required to follow this chapter if you handle, store, or transfer food as a part of your job.

2. What this chapter covers

This chapter describes the basic methods for you to use in preventing food-borne illness. Food served at JSC shall be clean, wholesome, free from germs or other toxins, and meet consumer expectations. It applies to transporting, storing, preparing, serving, vending, and inspecting food. This chapter meets the provisions in the following:

- a. United States Department of Health and Human Services, U.S. Food and Drug Administration (FDA), Center for Food Safety and Applied Nutrition (CFSAN) publications titled "Food Code" and "Managing Food Safety: A Manual for the Voluntary Use of HACCP [Hazard Analysis and Critical Control Point] Principles for Operators of Food Service and Retail Establishments."
- b. Texas Food Establishment Rules and other applicable regulations of the Texas Department of State Health Services (DSHS).
- c. Food Ordinance of the City of Houston.
- d. NPR 1800.1, Chapter 4.10

3. Hazard Analysis Critical Control Points

HACCP is a prevention-based food safety management system that identifies and monitors specific food safety hazards that can adversely affect the safety of food products. All food prepared on site shall follow an HACCP or equivalent management system that includes and implements a process of self-inspection and continuous improvement.

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4. Certifications and employment conditions for food service

To be certified to serve food, you shall:

- a. Have an initial medical examination within 30 days of employment and annual examinations thereafter (JSC Form 270). See Chapter 3.6, “Occupational Healthcare Program,” of this handbook for more details. This applies to anyone involved in preparing or serving food and beverages. The JSC Clinic will give you the examination and a health certificate card (JSC Form 1169). The health certificate card shall be on file for inspection purposes.
- b. Never work with or around food or food preparation areas if you:
 - 1. Are affected with a disease in a communicable form or are a carrier of a disease.
 - 2. Are afflicted with boils.
 - 3. Have infected wounds.
 - 4. Have an acute respiratory infection.

5. Who to coordinate with for food service concerns

This table tells you whom to contact for certain food service concerns:

<i>For . . .</i>	<i>Coordinate with the . . .</i>
Scheduling and performing food service inspections or investigating food-related complaints	Occupational Health Department (281) 483-6726
Scheduling medical examinations	JSC Occupational Medicine Clinic (281) 483-4111
Ensuring compliance with requirements	Exchange Operations Manager

6. Other rules to follow or know about

You shall follow these rules when handling food:

- a. Never remove or alter hold orders, notices, or tags placed on food by the health authorities. Re-labeling, repacking, reprocessing, altering, disposing of, or destroying this food is also forbidden without permission. You may put food that is on hold or has a tag on it from the health authorities in suitable storage for holding.
- b. Thoroughly wash your hands and arms with soap and warm water:
 - 1. Before starting work.
 - 2. During work hours, as often as necessary, to remove soil and contamination.
 - 3. After using the toilet room.
 - 4. After using tobacco products, applying cosmetics, and eating.

7. How to protect food

This section is not all-inclusive but highlights key food safety techniques. To prevent food-borne illnesses, you shall:

- a. Protect all food being stored, prepared, displayed, served, sold, or transported between activities from contamination including dust, flies, rodents and other vermin, unclean utensils and work surfaces, unnecessary handling, coughs, sneezes, and flooding.
- b. Provide conveniently located refrigeration facilities, hot food storage and display facilities, and effective insulated facilities as needed to make sure all food is kept at required temperatures during storage, preparation, display, and service. Keep all cold food at temperatures below 40°F and keep all hot food at temperatures above 140°F. All dated food items should be within designated shelf life. Remove outdated food items.
- c. Protect unwrapped food placed on display from contamination from customers and other sources. Use effective, easily cleaned, counter-protective devices, cabinets, display cases, containers, or other kinds of protective equipment.
- d. Design and arrange self-service openings in counter guards to protect food from contact by customers.
- e. Keep all garbage and rubbish that contains food waste in plastic bags that are in containers of durable metal or other approved materials that don't leak and don't absorb liquids.
- f. Dispose of all garbage and rubbish daily in a manner so as to prevent a nuisance. The Clinic Services Branch may approve other frequencies for disposing of garbage or rubbish.
- g. Take effective control measures to keep rodents, flies, roaches, or other vermin from entering or breeding in any food service or preparation areas. All buildings shall be effectively vermin-proofed, free of vermin, and kept in a vermin-proof and vermin-free condition.
- h. Prevent flies and other flying insects from entering through windows, door, skylights, intake openings, or exhaust openings. Use any effective methods such as the following:
 1. Self-closing doors that open outwards
 2. Closed windows
 3. Screens
 4. Controlled air currents
- i. Keep the entire food service facility and all areas used for food service or preparation neat, clean, and free of litter, refuse, and garbage.
- j. Keep all refrigerators used for food storage clean at all times.

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8. Vending machines

All food offered for sale through vending machines shall be:

- a. Made, processed, and prepared in facilities that follow applicable federal, state, and local laws and regulations.
- b. Stored or packaged in clean, protective containers and be handled, transported, and vended in a sanitary manner.

9. Bottled Water Dispensers

Use only bottled water approved by the Clinic Services Branch in bottled water dispensers. Never refill empty bottles yourself. Only the processor is allowed to refill bottles. All organizations using bottled water shall ensure that:

- a. No bottles of water or bottled water dispensers are located or stored in areas where general hazards or contamination of any kind poses a threat to users under normal operations.
- b. Contractors and subcontractors furnishing bottled water provide routine chemical and microbiological laboratory analysis reports for bottled water delivered to the Center.
- c. Bottled water dispensers are maintained in a sanitary condition.
- d. All dispensers have equipment numbers.
- e. There is prompt recall of the suspect bottled water or other appropriate action when notified of contamination.

10. Protective clothing required for food service

You shall wear:

- a. Gloves when:
 1. You do multiple tasks such as handling money and preparing sandwiches.
 2. Frequent hand washing is not feasible.
- b. Reasonably clean outer garments if you handle food or food-contact surfaces, or wash dishes.
- c. A hair restraint if you prepare or serve food. The restraint shall completely cover your hair to keep hair from food and food-contact surfaces.

11. Food requirements you should be aware of

As an employee of the NASA Exchange or as a concessionaire, you shall:

- a. Follow applicable federal, state, and local laws and NASA Procedural Requirements and regulations.
- b. Protect food from contamination and spoilage while handling, packaging, storing, or transporting it.
- c. Make sure that the food that you serve is:
 1. Free from spoilage.
 2. Free from contamination.
 3. Free from misbranding.
 4. Protected from contamination while preparing, displaying or serving it. You shall also protect food that you are moving from one activity to another.

12. Inspections and food concerns

The Occupational Health Department is responsible for inspections and food concerns and will:

- a. At a minimum, inspect your food service activities per the following schedule:
 1. Buildings 3 and 11 cafeterias, and Buildings 1 and 4S snack bars are inspected monthly.
 2. Building 207 (Gilruth) is inspected quarterly.
 3. Building 211 (Child Care Center) is inspected semiannually in conjunction with the Child Care Center inspection.
 4. Occupational health personnel and food inspectors may enter your area at any reasonable time to inspect, re-inspect, and conduct unannounced spot inspections.
- b. Examine and sample food as often as necessary to detect contamination or misbranding. Food inspectors will also:
 1. Place food orders on hold if they are unwholesome or show signs of contamination or misbranding.
 2. Place food on hold until a laboratory can examine it.
- c. Investigate any reports of suspected food-borne illness from any food service establishment or employee. This may also involve examining the history of any suspected employee. The Occupational Health Department may:
 1. Restrict the suspected employee from any food service or vending activities.
 2. Close any suspected food service or vending activity until it believes no further danger exists.
 3. Restrict the suspected employee to a certain food service or vending area with no danger of transmitting disease.

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4. Require medical or laboratory examinations of the suspected employee, other employees, or bodily discharges.
- d. Investigate spoiled food products from vending machines. Occupational Health Services will work with the Exchange Operations to correct problems.

13. Other references

You can find more information on food safety in the following references:

- a. Diagnosis and Management of Food-borne Illnesses, A Primer for Physicians and Other Health Care Professionals, and Introduction and Clinical Considerations. Web site: http://www.ama-assn.org/ama1/pub/upload/mm/36/2004_food_introclin.pdf.
- b. HACCP-Based Standard Operating Procedures (SOPs). Web site: <http://sop.nfsmi.org/HACCPBasedSOPs.php>.
- c. Hand Hygiene in Retail & Food Service Establishments. Web site: <http://www.cfsan.fda.gov/~comm/handhyg.html>.
- d. Managing Food Safety: A Manual for the Voluntary Use of HACCP Principles for Operators of Food Service and Retail Establishments. Web site: <http://www.cfsan.fda.gov/~dms/hret2toc.html>.
- e. Managing Food Safety: A Regulator's Manual for Applying HACCP Principles to Risk-based Retail and Food Service Inspections and Evaluating Voluntary Food Safety Management Systems. Web site: <http://www.cfsan.fda.gov/~dms/hret3toc.html>.
- f. The Bad Bug Book. Web site: <http://www.cfsan.fda.gov/~mow/intro.html>.
- g. U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration, FDA Food Code, with changes (most recent edition). Web site: <http://www.cfsan.fda.gov/~dms/foodcode.html>.
- h. U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition, Managing Food Safety: A Manual for the Voluntary Use of HACCP Principles for Operators of Food Service and Retail Establishments (July 2005). Web site: <http://www.cfsan.fda.gov/~dms/hret2toc.html>.